

# GENERALIZED SEGMENTATION METHOD FOR ESTIMATION/OPTIMIZATION PROBLEM

## ABSTRACT OF THE DISCLOSURE

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A method for action selection based upon an objective of an outcome relative to a subject. In one embodiment, a training set is obtained that contains attributes of a subject. In the present embodiment, a best behavioral model for predicting an outcome when a subject has an action applied is calculated. The training set is mapped to the best behavioral model. The mapping provides a base from which a random sub-sample is acquired. In the present embodiment, a random sub-sample of the training set and the best behavioral model is then selected. This random sub-sample reduces the computational requirements when determining an optimized strategy. The optimized strategy provides an optimal action relative to the subject for the objective of the outcome. In one embodiment, the subject is a customer of a business entity, enabled to interact with the customer, and an action is a promotion offered by the business entity.

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